

## Metadata Glossary

### 1:1 principle

Dublin Core Terminology; the principle whereby related but conceptually different entities, for example a painting and a digital image of the painting, are described by separate metadata records (DC Glossary)

### administrative metadata

metadata used in managing and administering objects, e.g., location or donor information (Getty)

### application profile

an assemblage of metadata elements selected from one or more metadata schemas and combined in a compound schema. Application profiles provide the means to express principles of modularity and extensibility. The purpose of an application profile is to adapt or combine existing schemas into a package that is tailored to the functional requirements of a particular application, while retaining interoperability with the original base schemas. Part of such an adaptation may include the elaboration of local metadata elements that have importance in a given community or organization, but which are not expected to be important in a wider context. (Duval)

### application rules

rules that guide schema implementation and use. Application rules can be recorded in a specification, a set of guidelines or a DTD. Two common application rules for metadata elements are maximum occurrence (repeatable or nonrepeatable) and obligation (mandatory or optional). Application rules often identify official attribute value schemas or provide a list of values acceptable for element content. (Greenberg)

### attribute value schema

a schema that provides metadata element content values; e.g., subject heading lists, thesauri, name authority files and classificatory systems. (Greenberg)

### completeness

- (1) the metadata element set used should describe the target objects as completely as economically feasible
- (2) the application, as completely as possible, of the metadata element set to the target object population (Hillman)

### content model

a schema that defines data (including metadata) structures, including the types of elements, subelements, and values they can contain (Getty)

### content standard

standard authorities or sets of rules that determine the vocabulary, syntax, or format of what is entered into a data or metadata element, e.g., Art & Architecture Thesaurus, Library of Congress Subject Headings, Anglo-American Cataloging Rules, or Archives, Personal Papers, and Manuscripts. (Getty)

### conversion

can refer to either

- (1) conversion between schemas
- (2) conversion of encoding (x/html to xml)

### controlled vocabulary

prescribed list of terms or headings each one having an assigned meaning

Controlled vocabularies are designed for use in classifying or indexing documents and for searching them. They normally contain a unique preferred term for each concept or entity with links to that term from non-preferred terms. They may also show relationships between terms. (Willpower)

### crosswalk

a semantic mapping of metadata elements across metadata schema specifications. Crosswalks permit searching across multiple databases that use different schemas (Greenberg)

### descriptive metadata

metadata that supports the discovery of an object (DC Glossary)

### diacritic

A mark, such as the cedilla of façade or the acute accent of résumé, added to a letter to indicate a special phonetic value or distinguish words that are otherwise graphically identical (The Free Dictionary)

### **“dumb-down” rule**

Dublin Core terminology ; a rule for the application of Interoperability Qualifiers, which stipulates that qualifiers can refine but not extend the semantics of the element to which they are applied (Getty)

### **embedded metadata**

metadata that is maintained and stored within the object it describes; the opposite of stand-alone metadata (DC Glossary)

### **encoding rules**

the syntax or prescribed order for the elements contained in the metadata description (NISO)

### **extensible**

having the potential to be expanded in scope, area or size. In the case of Dublin Core, the ability to extend a core set of metadata with additional elements. (DC Glossary)

### **extension**

an element that is not officially part of a metadata scheme which is defined for use with that scheme for a particular application (NISO)

### **interoperability**

the ability of multiple systems, using different hardware and software platforms, data structures, and interfaces, to exchange and share data (NISO)

### **markup language**

a formal way of annotating a document or collection of digital data using embedded encoding tags to indicate the structure of the document or datafile and the contents of its data elements. This markup also provides a computer with information about how to process and display marked-up documents. (Getty)

### **metadata creator**

a person who creates metadata. A metadata creator falls into one of several classes:

- professional metadata creators; these include catalogers, indexers, and database administrators
- technical metadata creators; these include webmasters, data in-putters, paraprofessionals, encoders and other persons who create metadata and may have had basic training but not professional level training
- content creators; people who create the intellectual content of an object and the metadata for that object
- community / subject enthusiasts; people who have not had any formal metadata-creation training but have special subject knowledge and want to assist with documentation (Greenberg)

### **metadata elements**

properties of the object that are defined in a specification. “Author/creator”, “title” and “subject” are properties that are commonly identified as metadata elements. Metadata elements may also be defined as object attributes, a term that is used interchangeably with properties, although these two terms (properties and attributes) can have specific meanings in selected communities (Greenberg)

### **metadata functions**

the grouping of metadata elements by what they are used for. Common functions include:

- resource discovery
- resource management, administrative and preservation metadata
- resource usage, rights
- use metadata
- technical

### **metadata generation**

the act of creating or producing metadata. Metadata can be generated by people, tools and processes (Greenberg)

### **metadata harvesting**

a technique for extracting metadata from individual repositories and collecting it in a central catalog (NISO)

### **metadata qualification / qualifiers**

information that helps to define the metadata element content. The Dublin Core Metadata Initiative has identified two facets of qualification:

- a) type qualifiers refine the meaning of the metadata element content. For example, the metadata element ‘creator’ can be refined through the qualifiers of personal name or corporate body

b) schema qualifiers identify the attribute value schema (e.g., thesauri, classification system, etc.) providing the metadata element content (see also attribute value schema) (Greenberg)

### **metadata namespace**

A metadata namespace in the Web environment generally refers to an uniform resource identifier (URI) that links to an XML DTD or Schema for a metadata specification. The URIs are unique identifiers and keep multiple namespaces from clashing. A namespace can be composed of multiple namespaces (URIs) (Greenberg)

### **metadata record**

a full set of structured relevant metadata, comprising all relevant elements, describing one object. A metadata record can take many forms, as

- embedded metadata, part of the main object itself (e.g., the metadata of an XML file)
- standalone metadata, a completely separate record held apart from the object itself and even in a different format, e.g., an automated library catalogue
- an electronic file held as an extension of the main resource, e.g., the ‘format’ file of Word document (IGGI)

### **metadata schema**

a unified and structured set of rules developed for object documentation and functional activities. A schema is a conceptualization that is represented or formalized in a specification. The term metadata schema is often used interchangeably with metadata specification and metadata standard (Greenberg)

### **metadata semantics**

definitions of metadata elements delineated in a specification, data dictionary, or other resource. The semantic definition of a metadata element may be supported by a comment or examples and can reference metadata qualifiers, including attribute value schemas (Greenberg)

### **metadata specification**

an official representation of a schema conceptualization produced for humans and/or machine processing. Specifications provide metadata element semantics and often syntactic and schema application rules. A single schema may be represented by multiple metadata specifications that have been produced over time and are distinguished by version or release numbers. (Greenberg)

### **metadata syntax**

the form and structure with which metadata elements are combined; some examples include:

- arrangement syntax specifies the sequencing for metadata element deployment. For example, the metadata element of ‘price’ on an invoice. Some specifications dictate an order, some do not.
- content syntax specifies the content ordering for individual metadata elements. For example, a specification may recommend that ‘author’ metadata follow the syntax of last name, first name, middle initial or that ‘date’ metadata follow the syntax of year, month, date (YYYY-MM-DD)
- encoding syntax refers to the ordering of the symbols that comprise the encoding language. Examples of encoding languages used for metadata element identification are MARC, XML, and SGML. Each of these languages has syntactical rules for encoding metadata elements. In XML and SGML, all metadata content must be preceded by a start tag and followed by an end tag, e.g. <author> Davy Crockett </author> (DC Glossary & Greenberg)

### **metadata tags**

encoding that identifies the metadata elements. XML metadata tags identify metadata elements with a representative vocabulary term or an intelligible abbreviation, e.g., <author> (Greenberg)

### **namespace**

In XML, a namespace is a collection of names, identified by a [URI](#) reference, that are used in XML documents as element types and [attribute](#) names. In order for XML documents to be able to use elements and attributes that have the same name but come from different sources, there must be a way to differentiate between the markup elements that come from the different sources. (Webopedia.com)

### **nesting**

The way in which subelements may be contained within larger elements, resulting in multiple levels of metadata (Getty)

### **object**

any entity, form or node for which contextual metadata can be recorded (Greenberg)

### **Parsing**

parsing may be divided into parts: lexical analysis and semantic parsing. Lexical analysis divides strings into components based on punctuation or tagging. Semantic parsing then attempts to determine the meaning of the string. (DC Glossary)

### Persistent Uniform Resource Locator

an approach to the URL permanence problem proposed by OCLC. A PURL is a public alias for a document. A PURL remains stable, while the document's background URL will change as it is managed (e.g. moved) over time. A PURL is created by a Web administrator who is registered as a PURL "owner" and who maintains a mapping of the PURL to a current and functioning URL. A PURL is a form of URN. (DC Glossary)

### preservation metadata

metadata related to the preservation management of information resources, e.g., metadata used to document, or created as a result of, preservation processes performed on information resources (Getty)

### provenance

- (1) The agency, office or person of origin of records, i.e. the entity which created, received or accumulated and used the records in the conduct of business or personal life. Also referred to as records creator.
- (2) The chain of custody which reflects the office(s) or person(s) that created, received or accumulated and used the records in the conduct of business or in the course of personal life. Identifying and documenting the provenance of records is an essential part of establishing their authenticity and integrity as evidence.
- (3) In archival theory, the principle of provenance requires that archives of an agency or person not be mixed or combined with the archives of another, i.e. the archives are retained and documented in their functional and/or organizational context. (PBSCore)

### rights (management) metadata

metadata dealing with the intellectual property rights of an object (NISO)

### schema support

Refers to functions that support developing/creating a new schema; maintaining a schema, or importing schemas

### stand-alone metadata

metadata that is created, maintained and stored independently of the object it describes. The opposite of embedded metadata (DC Glossary)

### structural metadata

metadata that defines the digital object's internal organization and is needed for display and navigation of that object (DC Glossary)

### subject headings

an alphabetical list of words or phrases that represent a concept that is under authority control, e.g., the Library of Congress Subject Headings (DC Glossary)

### taxonomy

classification of concepts where each concept can have only one broader concept, as used, for example, in the classification of biological organisms (Willpower)

### technical metadata

metadata created for, or generated by, a computer system, relating to how the system or its content behaves or needs to be processed (Getty)

### thesaurus

a controlled vocabulary of terms or concepts that are structured hierarchically (parent/child relationships) or as equivalences (synonyms), and related terms (associative) (DC Glossary)

### transliteration

Conversion of names or text not written in the roman alphabet to roman-alphabet form. (AACR Glossary)

### URI

Universal Resource Identifier. A general set of names or addresses consisting of a string of characters that refer to a resource. Also called "Uniform Resource Identifier." URLs and URNs are types of URIs. (Getty)

### URL

Uniform Resource Locator. Also referred to as "Universal Resource Locator." A type of universal resource identifier. A URL is an Internet address that tells a user how and where to locate a specific file on the World Wide Web. A URL includes not only the name of a file, but also

the name of the host computer, the directory path to get to that file, and the protocol needed in order to use it (e.g., <http://www.w3.org/DesignIssues/Metadata> specifies

that the hypertext transfer protocol “http” should be used to retrieve the document Metadata from the host [www.w3c.org](http://www.w3c.org) in the directory / DesignIssues/). (Getty)

### **URN**

Uniform Resource Name. Also referred to as “Universal Resource Name/Number.” A unique, location-independent identifier of a file available on the Internet. The file remains accessible by its URN regardless of changes that might occur in its host and directory path. (Getty)

### **use metadata**

metadata, generally automatically created by the computer, that relates to the level and type of use of an information system. (Getty)

### **validation**

- (1) validating that syntax of element contents is correct (e.g. YYYY-MM-DD)
- (2) validating the encoding (e.g., XML)

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